one or more photoreactive groups, rather than the target. It is believed that this amendment overcomes the rejection. Reconsideration is respectfully requested.

The Rejection under 35 U.S.C. § 112, second paragraph

The Examiner has rejected Claims 11-12 under 35 U.S.C. § 112, second paragraph. The second paragraph of Section 112 requires that the claims set out and circumscribe a particular area which applicants regard as their invention with a *reasonable* degree of precision and particularity. Specifically, the Examiner has objected that Claim 11 is unclear as to whether the "one or more photoreactive groups" are attached to or simply in the vicinity of the nucleic acid ligands or target molecule. In response to this rejection, Claim 11 has been amended to recite that the nucleic acid ligands comprise one or more photoreactive groups. It is believed that this amendment overcomes the rejection. Reconsideration is respectfully requested.

The Rejection under 35 U.S.C. § 102(b)

The Examiner has rejected Claims 11-12 under 35 U.S.C. § 102(b) as being anticipated by Gold, et al., U.S. Patent No. 5,705,337. The Court of Appeals for the Federal Circuit has stated that anticipation requires the presence in a single prior art reference of each and every element of the claimed invention. *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984); *Alco Standard Corp. v. Tennessee Valley Auth.*, 1 U.S.P.Q.2d 1337, 1341 (Fed. Cir. 1986). "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic v. Genentech Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991) (citations omitted). As explained in detail below, Applicant believes that claim 1, as amended, is not anticipated by the prior art relied upon by the Examiner.

The Examiner asserts that the patent discloses nucleic acid ligands able to crosslink a target molecule comprising one or more photoreactive groups wherein the photoreactive group is 5-iodouracil.

The present application claims priority to U.S. Patent Application Serial No. 08/123,935, filed September 17, 1993, now abandoned. U.S. Patent Application Serial

No. 08/123,935 discloses nucleic acid ligands able to crosslink a target molecule comprising one or more photoreactive groups wherein the photoreactive group is 5-iodouracil. Thus, it is submitted that U.S. Patent Application Serial No. 08/123,935 discloses the same material as disclosed by U.S. Patent No. 5,705,337. Indeed, U.S. Patent No. 5,705,337 also claims priority to U.S. Patent Application Serial No. 08/123,935. It light of the teaching contained in the priority document, which predates the reference, Applicant submits that U.S. Patent No. 5,705,337 can not anticipate Claims 11 and 12. Reconsideration is respectfully requested.

The Double Patenting Rejections

An obviousness-type double patenting rejection is appropriate when a claim merely defines an obvious variation of an invention claimed in a patent. M.P.E.P. § 804(II)(B)(1). A double-patenting rejection must rely on a comparison with the claims in an issued or to be issued patent. M.P.E.P. § 804(III).

Specifically, the Examiner has rejected Claims 11-12 as being unpatentable over Claim 4 of U.S. Patent No. 5,705,337. The Examiner reasons that although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claim is drawn to a method in which nucleic acid ligands that bind covalently with a target molecule are identified wherein the candidate mixture nucleic acids in the method comprise photoreactive groups. The Examiner further reasons that it would have been obvious to the skilled practitioner in the art to provide the nucleic acid ligand identified by the recited method wherein such nucleic acid ligand comprises a photoreactive group which was known in the art to be able to crosslink a target molecule and where photoreactive groups including 5-bromouracil and 5-iodouracil were known in the art; and also that the skilled practitioner in the art would have been motivated by the known utility of nucleic acids in detection and purification of target molecules among other known benefits.

The Examiner has also rejected Claims 11-12 as being unpatentable over Claims 7 and 15 of U.S. Patent No. 6,001,577. The Examiner reasons that although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims are drawn to a method in which nucleic acid ligands that bind covalently

with a target molecule are identified wherein the candidate mixture nucleic acids in the method comprise photoreactive groups. The Examiner asserts that it would have been obvious to the skilled practitioner in the art to provide the nucleic acid ligand identified by the recited method wherein such nucleic acid ligand comprises a photoreactive group which was known in the art to be able to crosslink a target molecule and wherein photoreactive groups including 5-bromouracil and 5-iodouracil were known in the art. The Examiner further asserts that the skilled practitioner in the art would have been motivated by the known utility of nucleic acids in detection and purification of target molecules among other known benefits.

The Examiner has also rejected Claims 11-12 as being unpatentable over claim 5 of U.S. Patent No. 5,998,142. The Examiner reasons that although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claim is drawn to a nucleic acid ligand which binds covalently with a protein (target molecule) wherein the nucleic acid ligand comprises a chemically reactive functional unit defined in the patent as including photoreactive groups (column 10, lines 25-27) which include 5-iodouracil (column 29, Example 4).

The Examiner has also rejected Claims 11-12 as being unpatentable over claim 3 of U.S. Patent No. 5,962,219. The Examiner reasons that although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claim is drawn to a method in which nucleic acid ligands that bind covalently with a target molecule are identified wherein the candidate mixture nucleic acids in the method comprise photoreactive groups. The Examiner asserts that it would have been obvious to the skilled practitioner in the art to provide the nucleic acid ligand identified by the recited method wherein such nucleic acid ligand comprises a photoreactive group which was known in the art to be able to crosslink a target molecule and where photoreactive groups including 5-bromouracil and 5-iodouracil were known in the art. The Examiner further asserts that the skilled practitioner in the art would have been motivated by the known utility of nucleic acids in detection and purification of target molecules among other known benefits.

The Examiner has also rejected Claims 11-12 as being unpatentable over claims 15 and 16 of U.S. Patent No. 5,763,177. The Examiner reasons that although the

conflicting claims are not identical, they are not patentably distinct from each other because the patent claims are drawn to a nucleic acid ligand that photocrosslinks to a protein (target molecule) identified by a SELEX method wherein the candidate mixture nucleic acids comprise a photoreactive group selected from a group comprising the photoreactive groups recited in claim 12.

Applicants hereby agree to submit a terminal disclaimer with regard to U.S. Patent Nos. 5,705,337; 6,001,577; 5,998,142; 5,962,219; and 5,763,177, when allowable subject matter is determined.

Closing Remarks

Applicant believes that the pending claims are in condition for allowance. If it would be helpful to obtain favorable consideration of this case, the Examiner is encouraged to call and discuss this case with the undersigned.

This constitutes a request for any needed extension of time and an authorization to charge all fees therefore to deposit account No. 50-1643, if not otherwise specifically requested. The undersigned hereby authorizes the charge of any fees created by the filing of this document or any deficiency of fees submitted herewith to be charged to deposit account No. 50-1643.

Respectfully submitted,

Date: September 5, 2001

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Marked up version showing changes to claims under 37 C.F.R. § 1.121(c)(ii)

11. (Amended) Nucleic acid ligands able to crosslink a target molecule, wherein said nucleic acid ligands comprise [comprising] one or more photoreactive groups.